OFFICIAL ELECTION BULLETIN

September 12, 2016

TO: **County Election Officials**

FROM: **Chris Harvey, Elections Division Director**

RE: **GEMS Servers and Security**

In light of recent reports regarding election system security and vulnerabilities throughout the country, it is critically important that all counties preserve the security and integrity of their GEMS Server. We have previously sent updates and messages encouraging all counties to be vigilant in following existing requirements for the physical security of all election equipment, including GEMS, DREs, ExpressPolls, and other associated equipment.

With information and advice coming from many sources, it is critically important that every county remember that there should be no program, no product, no update, nor anything else added to or introduced to your GEMS Server without the direct and explicit direction of the Secretary of State's Office and/or Kennesaw State University's Center for Elections. This prohibition includes offerings, products, or solutions from local, state, or federal agencies who may be trying to provide what they feel to be assistance. Whether these solutions are described as "cyber hygiene", "virus protection" or other solutions, these programs simply cannot be introduced or added to your GEMS Server without the direct authorization of the Secretary of State or KSU.

Should any need to take any action with any election equipment arise, you will be specifically and directly contacted by the Secretary of State's Office regarding any such actions. If you ever question any communication from our office as genuine, please contact our office directly.

Again, nothing should be added to the GEMS Server without the explicit and direct instruction of the Secretary of State or KSU.

OFFICIAL ELECTION BULLETIN

July 26, 2018

TO: **County Election Officials and County Registrars**

FROM: **Chris Harvey, Elections Division Director**

RE: **Suspected Russian Operative Activity**

On July 13, Special Counsel Robert Mueller released an indictment that alleges that, on or about October 28, 2016, a suspected Russian operative "visited the websites of certain counties in Georgia, Iowa, and Florida to identify vulnerabilities."

Since the indictment was released, we have been working closely with the Department of Homeland Security to obtain more information. Now that we have more details, we are sharing with you what we have learned.

In 2016, the suspected Russian operative visited two Georgia county webpages. Those counties have been separately notified. There is no evidence that either of the county webpages were compromised as a result of this activity. Both webpages showed general, public information about elections. The federal government does not have information as to what actions the operative took in order "to identify vulnerabilities," but they assume that the operative was conducting research designed to assist future potential operations—for example, looking for email addresses to conduct spear phishing campaigns or attempting to understand what specific technology or processes are used in our election system. The Secretary of State's Office agrees with this assumption.

Georgia's election systems remain secure, and we continue to prioritize our security in this environment. However, I want to remind each of you that, as election officials, you are all high-value targets. Be vigilant. Have a security mindset. Many of you have received physical security assessments from DHS, and the report is that these have been helpful. DHS also offers on-site network security assessments. On-site security assessments can be requested through nccicusomterservice@hq.dhs.gov. The wait time for the network security assessments through DHS can be lengthy. Private sector vendors are also available without a lengthy wait. If your county wants to do a physical security or network security assessment, I will discuss the process with you and offer any support that our office can provide.

OFFICIAL ELECTION BULLETIN

July 30, 2018

TO: **County Election Officials and County Registrars**

FROM: **Chris Harvey, Elections Division Director**

RE: **Two Factor Authentication Security for ENET**

As part of our continued efforts to ensure the security of the voter registration system, we are activating Two Factor Authentication for all users attempting to access the ElectioNet system beginning on Monday, July 30, 2018 at 3:30 PM. This means that after that time, all ENET users will be required to enter their password and enter an authentication code sent to their mobile number or email account when they log into the system. Detailed instructions on ElectioNet's Two Factor Authentication can be found of Firefly under Training > GVRS - eNet – ElectioNet > "Two Factor Authentication Instruction Guide." You are encouraged to review these training materials as soon as possible.

In preparation for the implementation of Two Factor Authentication in ElectioNet, we have added the ability to associate a mobile number with your eNet account. To add a mobile number to your eNet account, navigate to the My Homepage screen by selecting the icon in the top left corner of the screen labeled "My Homepage" or navigate to System > My Homepage. On this page, you can update your information by selecting the "Modify Information" button at the bottom of the screen. Be sure to select the "Save Information" button before leaving the page so that your mobile number is retained by the system.

Once you have entered a mobile number, you will notice a verify button beside your mobile number and email account. Selecting this button will send a link to your email or mobile number that allows you to verify that you have entered your information correctly. This step is required before you will be able to receive a code using that delivery method. All users are encouraged to add a mobile number to their account and verify their mobile number and email as soon as possible. Once Two Factor Authentication is activated, failure to have verified your account will result in denial of access to ENET.

OFFICIAL ELECTION BULLETIN

August 9, 2018

TO: **County Election Officials and County Registrars**

FROM: **Chris Harvey, Elections Division Director**

RE: **Physical Security Assessments Offered by Dept. of Homeland Security**

This is a reminder and an encouragement for election officials to consider contacting the U.S. Department of Homeland Security (DHS) to conduct a Physical Security Assessment (PSA) on your election offices, storage facilities, or other locations in your county where election equipment or infrastructure is used or stored.

The PSAs are conducted at no cost to your county or office and can be completed in a few hours. You will be provided with suggestions for improvements to your already existing security systems and protocols.

Many counties of various sizes and resources have already taken advantage of this program, and I have heard very positive feedback about the process and interaction with DHS on these PSAs.

Dennis Mott, from DHS, is looking forward to hearing from all counties that are interested in completing a PSA in the lead-up to the 2018 General Election.

Please contact Dennis Mott directly by phone at **202-407-2793** or by email at dennis.mott@hq.dhs.gov

If you have questions about these PSAs or other security issues, please contact me directly.

OFFICIAL ELECTION BULLETIN

August 17, 2018

TO: **County Election Officials and County Registrars**

FROM: **Chris Harvey, Elections Division Director**

RE: **Phishing Attempt**

On 08-17-18, at approximately 11:12 AM, the Secretary of State's anti-phishing defenses identified an email that appeared to come from Nancy Boren, Muscogee County Election Director. The email offered an opportunity to shop at Walmart and a link for the recipient to click. Our office immediately contacted Nancy Boren directly and confirmed that she had not sent the email. She had already been alerted to the suspicious email and was working with her IT office to investigate the situation.

Our office activated our incidence response plans and immediately coordinated investigative and protective efforts with all of our security partners, including those in the federal government. Our office contacted Dept. of Homeland Security and MS-ISAC to advise them of the situation, and we took additional measures to make sure that ENET was secure. In addition, we sent out Buzz Posts and emails to county election officials to be on the alert for that or any other suspicious emails.

Muscogee County IT is working with the Department of Homeland Security and MS-ISAC to determine the nature and source of the apparent phishing attempt. Early indicators are that this was not specifically targeting the Muscogee County Elections Office.

This is a timely reminder that email phishing attempts remain one of the more popular and effective methods of cyber attack. It is imperative that all county offices train their employees on the nature of email phishing attempts and to exercise great care when interacting with email, especially email with embedded links or attachments. The additional security features added to ENET, such as two-factor authentication, continue to provide protection for ENET and other cyber systems, but the individual user still must use consistent caution when interacting with others through email and other cyber communications.

If you have questions about this situation, please contact the Secretary of State's Office.

Homeland Security

Intelligence Enterprise

INTELLIGENCE NOTE

3 October 2018

(U//FOUO) Cybersecurity – Elections, Unattributed Network Activity

(U//FOUO) Unattributed Cyber Actors Attempt to Gain Access to City Government Network Prior to Primary Election Voting

(U//FOUO) Scope. This *Intelligence Note* provides recent intelligence and technical indicators related to malicious activity by unattributed cyber actors, indicating possible attempts to interfere with state election infrastructure or processes. I&A prepared this *Note* for state and local government network defenders and elections officials.

(U//FOUO) Prepared by the Office of Intelligence and Analysis (I&A), Cyber Mission Center (CYMC). Coordinated with the National Cybersecurity and Communications Integration Center (NCCIC).

(U//FOUO) City Government Computer System Experiences Large Volume of Unauthorized Login Attempts

(U//FOUO) Unattributed cyber actors from 7 to 13 August 2018—the week prior to primary election voting—made at least 1,000 daily attempts to obtain unauthorized access to a server belonging to a Midwestern city government, according to a DHS report derived from a state law-enforcement official with direct and indirect access to cyber information.[1] In one 24-hour period during this timeframe, the actors used at least 615 unique Internet Protocol (IP) addresses to make 1,118 unauthorized login attempts, according to the same report. This state administers elections at the municipal level, which is where the described activity took place. The targeted server did not store sensitive information, and no data was exfiltrated during these events, according to the same report.

(U) Support to Computer Network Defense

(U//FOUO) The 615 IP addresses identified in that 24-hour period made at least one or more unauthorized login attempts. Of the 615 IP addresses, 4 resolved to the United States, while the remainder resolved to China (445), Brazil (42), Republic of Korea (17), India (13), Egypt (11), Russia (9), and 37 other countries, according to the same report. The chart on the following page lists the suspicious IP addresses, along with country of origin and number of access attempts associated with each. No city personnel were traveling outside the United States at the time of the incident, according to the same report.

(U//FOUO) IP Addresses Associated with Malicious Login Attempts

UNCLASSIFIED//FOR OFFICIAL USE ONLY

Country	IP Address	Number of Access Attempts
Angola	41[.]210[.]223[.]10	2
Argentina	190[.]210[.]182[.]93	4
	132[.]255[.]226[.]18	4
Australia	203[.]41[.]236[.]130	1
	47[.]74[.]66[.]207	2
Belgium	81[.]82[.]223[.]109	1
Bolivia	192[.]223[.]94[.]132	2
	200[.]58[.]160[.]67	3
Brazil	186[.]215[.]199[.]65	3
	138[.]97[.]91[.]18	1
	187[.]58[.]132[.]251	3
	189[.]114[.]67[.]213	2
	186[.]215[.]198[.]137	1
	187[.]58[.]134[.]57	4
	201[.]48[.]167[.]171	2
	186[.]215[.]199[.]219	4
	189[.]59[.]69[.]3	1
	138[.]97[.]241[.]168	2
	187[.]58[.]151[.]15	1
	186[.]215[.]143[.]149	1
	186[.]248[.]75[.]23	1
	186[.]232[.]141[.]145	1
	186[.]215[.]199[.]69	3
	177[.]43[.]244[.]209	1
	152[.]249[.]245[.]68	4
	179[.]184[.]113[.]95	1
	186[.]215[.]130[.]242	1
	177[.]159[.]99[.]31	2
	177[.]131[.]110[.]4	3
	189[.]59[.]5[.]81	1
	177[.]135[.]101[.]101	1
	189[.]59[.]5[.]91	1
	201[.]47[.]252[.]79	1
	186[.]232[.]141[.]2	1
	189[.]44[.]177[.]5	1
	186[.]249[.]13[.]250	1
	179[.]184[.]23[.]195	2

	177[.]135[.]101[.]93	2	
	200[.]175[.]104[.]101	2	
	177[.]43[.]247[.]139	1	
	177[.]43[.]251[.]139	1	
	177[.]43[.]243[.]231	1	
	179[.]184[.]115[.]3	1	
	189[.]114[.]95[.]17	1	
	200[.]223[.]205[.]138	1	
	186[.]215[.]199[.]223	1	
	143[.]208[.]79[.]162	1	
	177[.]43[.]251[.]153	2	
	177[.]159[.]103[.]9	1	
	200[.]186[.]49[.]229	1	
Bulgaria	87[.]121[.]76[.]189	4	
	31[.]13[.]227[.]4	6	
	78[.]83[.]247[.]202	2	
	78[.]83[.]105[.]149	1	
Chile	200[.]29[.]136[.]155	2	
	200[.]29[.]140[.]52	1	
China	157[.]122[.]183[.]218	2	
	218[.]89[.]38[.]239	1	
	120[.]68[.]44[.]204	1	
	183[.]65[.]17[.]118	4	
	218[.]108[.]102[.]209	3	
	125[.]65[.]109[.]75	1	
	218[.]23[.]49[.]154	3	
	221[.]10[.]230[.]228	1	
	61[.]150[.]76[.]90	1	
	61[.]158[.]188[.]21	13	
	183[.]167[.]205[.]103	1	
	218[.]107[.]49[.]71	5	
	119[.]60[.]27[.]62	1	
	118[.]144[.]83[.]130	2	
	210[.]74[.]131[.]204	3	
	61[.]160[.]81[.]62	1	
	220[.]191[.]211[.]167	1	
	202[.]110[.]187[.]146	2	
	60[.]2[.]50[.]114	2	
	61[.]167[.]79[.]135	2	
	58[.]218[.]194[.]81	1	
	183[.]161[.]35[.]38	2	

	121[.]49[.]106[.]6	2	
	182[.]140[.]131[.]130	1	
	223[.]223[.]201[.]217	2	
	61[.]132[.]233[.]195	3	
	223[.]100[.]152[.]42	2	
	125[.]46[.]81[.]195	4	
	220[.]179[.]250[.]175	1	
	221[.]178[.]227[.]10	1	
	220[.]173[.]107[.]124	3	
	112[.]25[.]220[.]99	2	
	58[.]210[.]134[.]186	2	
	124[.]128[.]73[.]58	4	
	220[.]171[.]48[.]39	1	
	61[.]177[.]60[.]140	3	
	60[.]216[.]116[.]178	2	
	61[.]185[.]242[.]195	1	
	222[.]187[.]197[.]208	2	
	123[.]232[.]119[.]21	7	
	58[.]53[.]146[.]60	2	
	222[.]88[.]238[.]11	1	
	183[.]224[.]81[.]214	1	
	221[.]212[.]58[.]242	3	
	219[.]138[.]66[.]229	1	
	60[.]172[.]73[.]3	1	
	221[.]224[.]114[.]229	1	
	221[.]224[.]2[.]202	1	
	119[.]29[.]191[.]40	1	
	119[.]90[.]34[.]135	1	
	112[.]24[.]104[.]236	1	
	220[.]164[.]2[.]61	2	
	202[.]109[.]164[.]31	2	
	183[.]214[.]89[.]122	1	
	60[.]172[.]69[.]66	2	
	222[.]191[.]233[.]238	2	
	61[.]148[.]196[.]114	5	
	220[.]164[.]2[.]113	1	
	222[.]189[.]186[.]67	2	
	222[.]89[.]231[.]12	1	
	60[.]173[.]149[.]204	1	
	121[.]28[.]40[.]179	1	
	203[.]191[.]145[.]46	1	

	61[.]191[.]252[.]218	2
	112[.]91[.]108[.]190	4
	210[.]21[.]86[.]253	3
	222[.]162[.]70[.]249	2
	182[.]131[.]125[.]7	2
	61[.]150[.]76[.]201	1
	60[.]171[.]110[.]17	2
	112[.]23[.]7[.]88	1
	139[.]199[.]72[.]40	1
	58[.]222[.]105[.]114	4
	218[.]75[.]148[.]181	1
	220[.]174[.]209[.]154	1
	221[.]131[.]86[.]182	1
	222[.]33[.]117[.]102	2
	221[.]12[.]137[.]6	2
	219[.]159[.]229[.]115	2
	60[.]166[.]12[.]117	5
	60[.]175[.]71[.]194	3
	218[.]28[.]234[.]53	2
	182[.]106[.]216[.]4	1
	117[.]40[.]236[.]179	1
	60[.]166[.]60[.]26	3
	59[.]50[.]104[.]194	2
	222[.]84[.]118[.]83	1
	219[.]131[.]197[.]26	1
	112[.]113[.]241[.]17	2
	220[.]164[.]193[.]238	2
	221[.]130[.]130[.]238	1
	112[.]16[.]214[.]182	1
	222[.]35[.]21[.]206	1
	124[.]207[.]57[.]146	1
	219[.]138[.]244[.]91	3
	118[.]112[.]183[.]204	2
	218[.]65[.]220[.]48	1
	59[.]39[.]92[.]162	1
	115[.]238[.]247[.]228	4
	115[.]236[.]24[.]10	1
	116[.]249[.]127[.]11	1
	218[.]29[.]219[.]18	2
	218[.]201[.]83[.]148	1
	119[.]90[.]40[.]171	1

	222[.]161[.]229[.]55	1	
	120[.]209[.]71[.]14	1	
	218[.]22[.]187[.]66	1	
	221[.]224[.]25[.]26	1	
	111[.]85[.]27[.]126	1	
	116[.]228[.]90[.]9	3	
	220[.]163[.]114[.]226	2	
	117[.]35[.]207[.]102	2	
	218[.]29[.]6[.]9	2	
	61[.]187[.]189[.]254	1	
	218[.]66[.]84[.]85	1	
	58[.]18[.]137[.]83	6	
	220[.]164[.]2[.]77	1	
	36[.]33[.]35[.]217	2	
	113[.]140[.]48[.]158	1	
	218[.]92[.]229[.]178	1	
	61[.]189[.]47[.]93	2	
	220[.]164[.]2[.]114	1	
	123[.]234[.]215[.]242	3	
	124[.]227[.]119[.]248	2	
	220[.]178[.]107[.]242	1	
	122[.]139[.]5[.]237	2	
	59[.]45[.]222[.]24	1	
	1[.]202[.]178[.]154	1	
	61[.]178[.]74[.]27	1	
	119[.]1[.]98[.]121	1	
	222[.]217[.]221[.]179	2	
	222[.]223[.]56[.]116	1	
	61[.]50[.]130[.]146	4	
	218[.]28[.]50[.]51	1	
	114[.]251[.]196[.]28	1	
	61[.]163[.]196[.]149	1	
	58[.]242[.]164[.]10	2	
	60[.]173[.]133[.]229	1	
	218[.]201[.]14[.]134	2	
	112[.]26[.]82[.]52	1	
	219[.]148[.]39[.]134	1	
	219[.]142[.]25[.]106	1	
	218[.]22[.]148[.]100	3	
	58[.]19[.]204[.]129	4	
	210[.]82[.]28[.]41	4	

	220[.]163[.]44[.]182	2
	61[.]158[.]186[.]84	2
	218[.]22[.]235[.]138	1
	218[.]64[.]77[.]62	1
	223[.]241[.]100[.]16	2
	218[.]92[.]237[.]2	3
	58[.]220[.]234[.]18	1
	124[.]161[.]35[.]88	4
	222[.]185[.]255[.]227	1
	58[.]211[.]169[.]50	1
	61[.]177[.]81[.]158	2
	61[.]143[.]130[.]162	2
	122[.]226[.]136[.]90	1
	218[.]22[.]129[.]38	1
	112[.]4[.]172[.]182	1
	202[.]96[.]199[.]157	1
	220[.]174[.]241[.]102	1
	60[.]247[.]92[.]186	2
	222[.]169[.]186[.]242	2
	220[.]164[.]2[.]123	1
	60[.]2[.]111[.]190	3
	116[.]112[.]207[.]235	2
	112[.]26[.]80[.]145	1
	61[.]185[.]137[.]161	1
	218[.]29[.]52[.]2	1
	60[.]255[.]181[.]245	1
	119[.]79[.]234[.]12	3
	60[.]174[.]192[.]240	3
	61[.]160[.]95[.]126	2
	61[.]191[.]123[.]11	1
	221[.]237[.]208[.]10	1
	220[.]164[.]162[.]146	1
	58[.]213[.]133[.]18	2
	211[.]154[.]10[.]60	2
	58[.]20[.]187[.]21	6
	211[.]137[.]8[.]103	3
	61[.]233[.]18[.]34	1
	60[.]171[.]155[.]26	1
	60[.]222[.]227[.]195	1
	58[.]59[.]14[.]195	1
	221[.]226[.]176[.]254	4

	59[.]51[.]66[.]168	1	
	1[.]190[.]175[.]66	3	
	218[.]104[.]207[.]53	4	
	58[.]42[.]251[.]184	2	
	183[.]64[.]166[.]163	2	
	61[.]134[.]83[.]10	1	
	117[.]40[.]185[.]78	1	
	60[.]191[.]206[.]110	1	
	222[.]189[.]41[.]46	1	
	222[.]76[.]48[.]121	1	
	221[.]0[.]194[.]23	5	
	58[.]213[.]46[.]110	1	
	61[.]145[.]228[.]110	2	
	111[.]72[.]252[.]82	1	
	60[.]212[.]42[.]56	8	
	125[.]77[.]72[.]197	1	
	60[.]12[.]84[.]190	1	
	218[.]28[.]58[.]186	1	
	222[.]84[.]60[.]22	1	
	125[.]70[.]227[.]38	2	
	58[.]62[.]55[.]130	1	
	111[.]38[.]140[.]12	2	
	222[.]170[.]168[.]82	1	
	220[.]175[.]154[.]205	1	
	122[.]228[.]133[.]130	1	
	61[.]178[.]160[.]83	1	
	218[.]58[.]227[.]67	4	
	220[.]169[.]102[.]6	1	
	221[.]199[.]41[.]218	1	
	218[.]25[.]31[.]150	1	
	119[.]60[.]26[.]162	1	
	122[.]224[.]135[.]138	2	
	61[.]145[.]107[.]238	2	
	60[.]13[.]197[.]131	1	
	60[.]173[.]143[.]222	1	
	58[.]20[.]36[.]88	3	
	58[.]216[.]199[.]229	1	
	222[.]218[.]124[.]49	1	
	211[.]92[.]143[.]94	2	
	218[.]87[.]46[.]173	1	
	222[.]87[.]139[.]44	1	

	60[.]172[.]64[.]229	1
	116[.]248[.]41[.]55	1
	218[.]57[.]237[.]243	3
	222[.]222[.]219[.]154	1
	115[.]239[.]244[.]198	2
	124[.]128[.]25[.]147	6
	58[.]240[.]2[.]38	1
	120[.]42[.]52[.]82	1
	124[.]164[.]235[.]209	3
	112[.]27[.]129[.]78	1
	219[.]232[.]115[.]95	3
	60[.]169[.]26[.]22	2
	111[.]75[.]162[.]114	2
	123[.]138[.]78[.]210	4
	222[.]240[.]159[.]130	1
	222[.]161[.]47[.]82	3
	220[.]178[.]151[.]125	1
	60[.]173[.]69[.]118	2
	218[.]207[.]74[.]9	1
	218[.]22[.]253[.]37	2
	111[.]1[.]89[.]230	1
	60[.]171[.]157[.]209	1
	218[.]23[.]26[.]50	1
	61[.]180[.]38[.]132	1
	211[.]147[.]65[.]218	1
	59[.]61[.]73[.]130	1
	36[.]7[.]79[.]21	1
	112[.]16[.]58[.]21	1
	124[.]42[.]103[.]139	3
	60[.]30[.]5[.]5	2
	61[.]187[.]123[.]74	1
	222[.]218[.]17[.]189	1
	220[.]164[.]2[.]88	1
	219[.]138[.]59[.]240	1
	218[.]28[.]164[.]218	3
	113[.]204[.]147[.]26	2
	101[.]231[.]140[.]218	3
	120[.]202[.]36[.]46	1
	60[.]174[.]118[.]80	1
	221[.]7[.]96[.]91	1
	124[.]129[.]30[.]246	3

	211[.]142[.]86[.]210	2
	218[.]65[.]3[.]210	1
	218[.]26[.]163[.]125	1
	121[.]15[.]254[.]22	1
	120[.]209[.]31[.]231	2
	119[.]39[.]84[.]75	2
	220[.]164[.]2[.]138	1
	60[.]169[.]65[.]62	2
	110[.]249[.]218[.]69	2
	125[.]35[.]93[.]62	2
	218[.]22[.]206[.]178	1
	58[.]216[.]224[.]59	1
	58[.]216[.]238[.]76	1
	218[.]56[.]45[.]28	3
	115[.]239[.]173[.]170	1
	218[.]201[.]62[.]71	2
	60[.]172[.]43[.]228	1
	218[.]57[.]236[.]58	2
	125[.]77[.]127[.]97	1
	218[.]22[.]100[.]42	1
	223[.]72[.]168[.]150	1
	221[.]193[.]214[.]166	1
	60[.]2[.]101[.]221	5
	61[.]136[.]81[.]154	2
	221[.]178[.]192[.]194	2
	115[.]238[.]34[.]226	1
	60[.]171[.]140[.]110	1
	221[.]231[.]109[.]126	1
	220[.]168[.]205[.]16	1
	183[.]167[.]231[.]206	1
	220[.]178[.]177[.]15	1
	222[.]161[.]209[.]130	2
	61[.]28[.]113[.]58	3
	117[.]158[.]187[.]110	3
	218[.]28[.]135[.]178	2
	218[.]28[.]171[.]213	1
	222[.]218[.]17[.]94	2
	60[.]161[.]215[.]7	1
	60[.]174[.]92[.]50	1
	61[.]153[.]49[.]210	3
	220[.]164[.]2[.]118	1

	61[.]161[.]209[.]134	3	
	123[.]138[.]199[.]66	4	
	111[.]204[.]225[.]178	2	
	114[.]104[.]158[.]172	1	
	60[.]172[.]231[.]12	1	
	59[.]52[.]27[.]130	1	
	61[.]161[.]147[.]218	2	
	218[.]22[.]180[.]146	1	
	219[.]138[.]243[.]196	2	
	58[.]221[.]60[.]110	1	
	175[.]19[.]204[.]202	6	
	60[.]28[.]131[.]10	1	
	119[.]53[.]91[.]170	4	
	60[.]11[.]113[.]164	3	
	58[.]18[.]170[.]107	5	
	27[.]42[.]165[.]226	4	
	220[.]164[.]2[.]124	1	
	60[.]166[.]48[.]158	1	
	60[.]10[.]41[.]203	1	
	124[.]207[.]209[.]114	1	
	220[.]178[.]26[.]20	1	
	122[.]97[.]16[.]154	4	
	60[.]171[.]164[.]47	1	
	122[.]224[.]3[.]12	2	
	60[.]174[.]37[.]226	1	
	203[.]93[.]109[.]130	1	
	117[.]69[.]253[.]252	1	
	122[.]140[.]95[.]92	2	
	60[.]6[.]223[.]191	1	
	61[.]136[.]94[.]166	3	
	61[.]163[.]36[.]24	3	
	14[.]204[.]55[.]6	1	
	58[.]214[.]239[.]53	1	
	222[.]92[.]204[.]50	1	
	116[.]113[.]86[.]246	1	
	60[.]30[.]224[.]189	3	
	218[.]94[.]137[.]82	1	
	222[.]242[.]226[.]99	1	
	222[.]161[.]246[.]150	5	
	43[.]227[.]254[.]4	3	
	61[.]182[.]241[.]10	1	

	119[.]48[.]16[.]182	5	
	122[.]139[.]5[.]236	3	
	111[.]26[.]198[.]30	1	
	58[.]19[.]182[.]235	4	
	58[.]22[.]194[.]44	3	
	58[.]214[.]24[.]53	1	
	220[.]189[.]205[.]2	1	
	60[.]13[.]181[.]244	2	
	60[.]13[.]3[.]26	6	
	61[.]158[.]140[.]152	1	
	220[.]164[.]2[.]91	1	
	117[.]28[.]250[.]42	4	
	42[.]228[.]1[.]34	5	
	60[.]216[.]106[.]162	2	
	218[.]58[.]105[.]206	2	
	218[.]26[.]97[.]162	1	
	222[.]141[.]50[.]134	2	
	219[.]154[.]133[.]161	3	
	221[.]210[.]134[.]161	1	
	112[.]91[.]59[.]106	1	
	221[.]212[.]18[.]146	1	
	219[.]154[.]66[.]223	1	
	218[.]24[.]236[.]4	1	
	58[.]244[.]188[.]78	1	
	218[.]200[.]55[.]214	1	
	122[.]195[.]155[.]194	1	
	111[.]206[.]163[.]56	3	
	221[.]4[.]205[.]30	2	
	61[.]53[.]66[.]4	3	
	123[.]7[.]54[.]235	1	
	61[.]163[.]229[.]226	1	
	171[.]221[.]226[.]23	1	
	122[.]227[.]185[.]67	2	
	221[.]210[.]83[.]24	3	
	60[.]223[.]252[.]6	2	
	61[.]136[.]81[.]234	1	
	218[.]94[.]144[.]101	3	
	119[.]53[.]149[.]66	1	
	221[.]3[.]236[.]94	1	
	61[.]182[.]27[.]121	2	
	221[.]176[.]176[.]126	1	

	110[.]17[.]188[.]30	1	
	58[.]20[.]185[.]12	2	
	218[.]27[.]162[.]22	2	
	124[.]165[.]247[.]42	1	
	61[.]136[.]104[.]131	3	
	60[.]6[.]214[.]48	2	
	221[.]207[.]20[.]154	1	
	61[.]163[.]69[.]170	1	
	60[.]30[.]66[.]199	3	
	113[.]8[.]194[.]3	1	
	116[.]113[.]96[.]22	1	
	221[.]230[.]1[.]113	1	
	122[.]225[.]238[.]98	1	
	221[.]7[.]133[.]28	1	
	218[.]56[.]102[.]14	1	
	116[.]228[.]50[.]194	1	
	60[.]6[.]227[.]95	1	
	210[.]73[.]8[.]244	1	
	60[.]167[.]19[.]30	1	
	120[.]237[.]228[.]16	2	
	218[.]64[.]165[.]194	1	
	111[.]38[.]216[.]5	1	
	218[.]22[.]66[.]30	1	
	111[.]113[.]11[.]82	1	
	222[.]186[.]68[.]154	1	
	221[.]2[.]157[.]133	1	
	222[.]243[.]211[.]200	1	
	221[.]4[.]197[.]154	1	
	60[.]8[.]207[.]34	1	
	61[.]178[.]243[.]56	1	
	218[.]204[.]69[.]3	1	
	124[.]112[.]193[.]26	1	
	58[.]210[.]126[.]206	1	
	123[.]172[.]215[.]62	1	
	120[.]209[.]115[.]132	1	
	218[.]28[.]76[.]99	1	
	218[.]3[.]210[.]2	1	
	218[.]23[.]162[.]169	1	
	58[.]214[.]25[.]190	1	
	221[.]202[.]201[.]85	1	
	220[.]164[.]2[.]100	1	

	221[.]239[.]8[.]178	1	
	113[.]240[.]237[.]10	1	
	220[.]163[.]44[.]185	1	
	58[.]216[.]156[.]58	1	
	218[.]241[.]156[.]10	1	
	60[.]172[.]22[.]178	1	
	61[.]134[.]52[.]164	1	
	36[.]33[.]0[.]160	1	
	218[.]104[.]133[.]243	1	
	61[.]136[.]82[.]164	1	
	112[.]24[.]104[.]228	1	
	221[.]131[.]83[.]162	1	
Colombia	190[.]60[.]31[.]185	2	
	190[.]90[.]41[.]234	1	
	201[.]184[.]241[.]243	3	
Czech Republic	90[.]179[.]120[.]155	3	
	90[.]183[.]127[.]106	4	
	85[.]70[.]69[.]194	4	
Denmark	85[.]191[.]101[.]60	5	
Egypt	41[.]41[.]160[.]186	1	
	197[.]50[.]15[.]189	3	
	41[.]128[.]185[.]155	2	
	197[.]50[.]105[.]120	1	
	196[.]219[.]154[.]248	1	
	41[.]39[.]155[.]221	1	
	197[.]44[.]214[.]61	2	
	197[.]45[.]1[.]118	1	
	41[.]38[.]128[.]154	2	
	41[.]39[.]153[.]128	1	
	41[.]41[.]30[.]169	1	
Germany	80[.]147[.]59[.]28	2	
Ghana	41[.]242[.]139[.]222	2	
Guatemala	190[.]56[.]70[.]131	1	
Jordan	82[.]212[.]83[.]154	4	
India	182[.]74[.]165[.]174	4	
	220[.]225[.]7[.]27	1	
	220[.]225[.]7[.]91	5	
	42[.]104[.]94[.]237	5	
	220[.]225[.]7[.]21	1	
	220[.]225[.]7[.]45	4	
	220[.]225[.]7[.]46	1	

	223[.]30[.]252[.]114	1
	220[.]225[.]7[.]49	1
	220[.]227[.]147[.]150	2
	220[.]225[.]7[.]31	2
	182[.]74[.]92[.]178	1
	220[.]225[.]7[.]19	1
Indonesia	203[.]142[.]65[.]102	1
	114[.]199[.]112[.]138	1
	202[.]93[.]35[.]19	2
Israel	109[.]226[.]23[.]26	1
	213[.]57[.]176[.]22	3
Italy	62[.]149[.]211[.]160	1
	88[.]32[.]17[.]110	1
	62[.]86[.]183[.]89	1
	80[.]19[.]218[.]22	1
Japan	220[.]102[.]99[.]96	1
	222[.]229[.]112[.]168	1
Laos	115[.]84[.]112[.]138	5
	202[.]137[.]141[.]81	7
	115[.]84[.]105[.]146	1
Malaysia	175[.]143[.]104[.]25	1
Mexico	201[.]140[.]110[.]78	4
	189[.]206[.]125[.]171	1
	189[.]204[.]6[.]157	1
Pakistan	182[.]190[.]4[.]84	1
Poland	85[.]89[.]165[.]89	1
Qatar	82[.]148[.]97[.]167	2
Republic of Korea	118[.]223[.]102[.]130	3
	112[.]179[.]242[.]181	1
	211[.]232[.]116[.]145	1
	222[.]101[.]93[.]2	2
	221[.]151[.]127[.]218	1
	123[.]214[.]172[.]84	2
	61[.]37[.]150[.]6	2
	121[.]128[.]135[.]75	3
	203[.]242[.]126[.]4	2
	206[.]219[.]17[.]55	4
	211[.]232[.]116[.]146	1
	1[.]255[.]70[.]86	3
	1[.]255[.]70[.]123	1
	1[.]255[.]70[.]114	2

	121[.]128[.]135[.]74	1	
	115[.]1[.]56[.]141	1	
	112[.]218[.]211[.]227	1	
Moldova	188[.]237[.]250[.]100	2	
	93[.]116[.]201[.]15	2	
	109[.]185[.]181[.]14	1	
Romania	82[.]77[.]6[.]21	3	
Russia	5[.]101[.]8[.]11	2	
	188[.]235[.]6[.]85	5	
	83[.]239[.]78[.]134	6	
	94[.]253[.]8[.]118	1	
	78[.]25[.]82[.]10	3	
	46[.]229[.]65[.]152	2	
	217[.]26[.]1[.]82	1	
	78[.]36[.]17[.]204	1	
	95[.]47[.]155[.]87	1	
Serbia	188[.]255[.]255[.]163	1	
Singapore	158[.]140[.]138[.]168	2	
Slovakia	193[.]150[.]73[.]22	2	
	217[.]119[.]114[.]106	1	
	195[.]88[.]83[.]34	3	
Taiwan	106[.]1[.]59[.]190	1	
	118[.]163[.]97[.]19	3	
	118[.]163[.]58[.]117	2	
	125[.]227[.]146[.]182	4	
	125[.]227[.]179[.]59	2	
	118[.]163[.]143[.]170	2	
	211[.]20[.]181[.]113	1	
	118[.]163[.]135[.]18	2	
Thailand	122[.]155[.]202[.]169	1	
	210[.]86[.]168[.]116	1	
Turkey	185[.]59[.]75[.]47	3	
Ukraine	109[.]254[.]8[.]169	1	
United Arab Emirates	83[.]110[.]55[.]14	1	
United Kingdom	109[.]170[.]184[.]211	4	
	77[.]44[.]110[.]101	4	
	109[.]170[.]160[.]102	2	
	109[.]170[.]160[.]109	2	
United States	67[.]237[.]78[.]130	1	
	216[.]59[.]166[.]113	1	
	168[.]103[.]20[.]54	4	

	50[.]252[.]166[.]69	1
Venezuela	190[.]202[.]44[.]194	1
Vietnam	14[.]177[.]235[.]133	3
	137[.]59[.]45[.]16	1

(U) Reporting Computer Security Incidents

(U) To report a computer security incident, either contact NCCIC at 888-282-0870, or go to https://forms.us-cert.gov/report/ and complete the US-CERT Incident Reporting System form. The US-CERT Incident Reporting System provides a secure, web-enabled means of reporting computer security incidents to US-CERT. An incident is defined as a violation or imminent threat of violation of computer security policies, acceptable use policies, or standard computer security practices. In general, types of activity commonly recognized as violating typical security policies include attempts (either failed or successful) to gain unauthorized access to a system or its data, including personally identifiable information; unwanted disruption or denial of service; the unauthorized use of a system for processing or storing data; and changes to system hardware, firmware, or software without the owner's knowledge, instruction, or consent.

(U) Tracked by: HSEC-1.1, HSEC-1.2, HSEC-1.5, HSEC-1.8

[1] (U//FOUO); DHS; IIR 4 007 0540 18; 150031Z AUG 2018; DOI 13 AUG 2018; (U//FOUO); Midwestern City Government Computer System Experiencing a Large Volume of Malicious Login Attempts Prior to Primary Election Voting; Extracted information is U//FOUO; Overall document classification is U//FOUO.

Homeland Security

Intelligence Enterprise

INTELLIGENCE NOTE

4 October 2018

(U) Cybersecurity – Elections, Unattributed Cyber Activity

(U//FOUO) Unattributed Cyber Actors Spoof Senior State Election Official's E-mail, Spear Phish City Clerk

(U//FOUO) Scope. This *Intelligence Note* provides recent intelligence and technical indicators from malicious activity by unattributed cyber actors that occurred prior to a US state's primary election, indicating possible attempts to interfere with state election infrastructure or processes. I&A prepared this *Note* for state and local government network defenders and elections officials.

(U//FOUO) Prepared by the DHS Intelligence Enterprise (DHS IE), Cyber Mission Center (CYMC). Coordinated with the National Cybersecurity and Communications Integration Center (NCCIC).

(U//FOUO) Spoofing of Senior State Election Official's E-mail for Spear Phishing

(U//FOUO) An unknown cyber actor on 5 July 2018 spoofed the e-mail address of the second highest ranking official in a state government elections organization to send a malicious spear-phishing e-mail to a city clerk-treasurer in the same state; however, no breach or data exfiltration occurred, according to DHS reporting derived from a state employee with direct access to cybersecurity information through support to a US state's election-related information technology systems.[1] The state issued a press release before this event announcing the state official's promotion to the number two position in the state elections organization and that the official has led the state's accessibility initiatives as well as voting equipment testing and auditing programs, among other initiatives, according to the same report. Elections in this state are administered at the municipal level, which is where the described activity occurred, according to the same report.

(U//FOUO) The e-mail used an "invoice"-themed subject, malicious hyperlink, and an Internet Protocol address that resolved to Mexico (187[.]188[.]77[.]218), according to the same report. Anti-phishing software removed a known bad hyperlink from the e-mail message, deleted or quarantined the malicious hyperlink, and replaced it with a notification message to the city clerk-treasurer, according to the report. No breach or data exfiltration occurred. The city clerk-treasurer notified the state election official that his identity was being used in a spear-phishing attempt, according to the report.

(U//FOUO) Support to Computer Network Defense

(U//FOUO) Image of Spear-Phishing E-mail[2]

UNCLASSIFIED//FOR OFFICIAL USE ONLY

-----Original Message-----
From: Lastname
Sent: Thursday, July 5, 2018 12:00 PM
To: Firstname Lastname, Clerk-Treasurer
<firstname.lastname@citynametwoletterstateabbreviation.gov>
Subject: Customer Invoice FO 4421502

Have you had a chance to review the invoice I sent last week? I'm sending it again.

USPER Business Agent Anti-phishing removed a known bad URL from your email message. It was deleted or quarantined and replaced with this message.

Yours,

Lastname, Firstname Middleinitial - XXX

(U) Reporting Computer Security Incidents

(U) To report a computer security incident, either contact NCCIC at 888-282-0870, or go to https://forms.us-cert.gov/report/ and complete the US-CERT Incident Reporting System form. The US-CERT Incident Reporting System provides a secure, web-enabled means of reporting computer security incidents to US-CERT. An incident is defined as a violation or imminent threat of violation of computer security policies, acceptable use policies, or standard computer security practices. In general, types of activity commonly recognized as violating typical security policies include attempts (either failed or successful) to gain unauthorized access to a system or its data, including personally identifiable information; unwanted disruption or denial of service; the unauthorized use of a system for processing or storing data; and changes to system hardware, firmware, or software without the owner's knowledge, instruction, or consent.

(U) Tracked by: HSEC-1.1, HSEC-1.2, HSEC-1.5, HSEC-1.8

[1] (U//FOUO); DHS; IIR 4 007 0606 18; 131225Z SEP 2018; DOI 05 JUL-23 AUG 2018; (U//FOUO); Spoofing of Senior State Election Official Email Address to Send Spearphishing Email to City Government Official; Extracted information is U//FOUO; Overall document classification is U//FOUO.

[2] (U//FOUO); DHS; IIR 4 007 0606 18; 131225Z SEP 2018; DOI 05 JUL-23 AUG 2018; (U//FOUO); Spoofing of Senior State Election Official Email Address to Send Spearphishing Email to City Government Official; Extracted information is U//FOUO; Overall document classification is U//FOUO.

CLASSIFICATION: **UNCLASSIFIED//FOR OFFICIAL USE ONLY**

Homeland Security

Office of Intelligence and Analysis

Customer Feedback Form

Product Title: (U//FOUO) Unattributed Cyber Actors Spoof Senior State Election Official's E-mail, Spear Phish City Clerk

All survey responses are completely anonymous. No personally identifiable information is captured unless you voluntarily offer personal or contact information in any of the comment fields. Additionally, your responses are combined with those of many others and summarized in a report to further protect your anonymity.

1. Please select partner type: Select One **and function:** Select One

2. What is the highest level of intelligence information that you receive? Select One

3. Please complete the following sentence: "I focus most of my time on:" Select One

4. Please rate your satisfaction with each of the following:

	Very Satisfied	Somewhat Satisfied	Neither Satisfied nor Dissatisfied	Somewhat Dissatisfied	Very Dissatisfied	N/A
Product's overall usefulness	○	○	○	○	○	○
Product's relevance to your mission	○	○	○	○	○	○
Product's timeliness	○	○	○	○	○	○
Product's responsiveness to your intelligence needs	○	○	○	○	○	○

5. How do you plan to use this product in support of your mission? *(Check all that apply.)*

- ☐ Drive planning and preparedness efforts, training, and/or emergency response operations
- ☐ Observe, identify, and/or disrupt threats
- ☐ Share with partners
- ☐ Allocate resources (e.g. equipment and personnel)
- ☐ Reprioritize organizational focus
- ☐ Author or adjust policies and guidelines
- ☐ Initiate a law enforcement investigation
- ☐ Intiate your own regional-specific analysis
- ☐ Intiate your own topic-specific analysis
- ☐ Develop long-term homeland security strategies
- ☐ Do not plan to use
- ☐ Other:

6. To further understand your response to question #5, please provide specific details about situations in which you might use this product.

7. What did this product *not* address that you anticipated it would?

8. To what extent do you agree with the following two statements?

	Strongly Agree	Agree	Neither Agree nor Disagree	Disagree	Strongly Disgree	N/A
This product will enable me to make better decisions regarding this topic.	○	○	○	○	○	○
This product provided me with intelligence information I did not find elsewhere.	○	○	○	○	○	○

9. How did you obtain this product? Select One

10. Would you be willing to participate in a follow-up conversation about your feedback? Yes

To help us understand more about your organization so we can better tailor future products, please provide:

Name:		*Position:*	
Organization:		*State:*	
Contact Number:		*Email:*	

Submit Feedback

Privacy Act Statement

CLASSIFICATION: **UNCLASSIFIED//FOR OFFICIAL USE ONLY**

Product Serial Number: IA-30352-19 REV: 01 August 2017

OFFICE OF THE DIRECTOR OF NATIONAL INTELLIGENCE
DIRECTOR OF THE NATIONAL COUNTERINTELLIGENCE AND SECURITY CENTER
WASHINGTON, DC 20511

NCSC-18-502

MEMORANDUM FOR: The Honorable Christopher C. Krebs
Under Secretary for National Protection and Programs Directorate
Department of Homeland Security

The Honorable David J. Glawe
Under Secretary for Intelligence and Analysis
Department of Homeland Security

Mr. Joshua D. Skule
Executive Assistant Director, Intelligence Branch
Federal Bureau of Investigation

SUBJECT: **Election Security Information Needs**: Foreign Threats to U.S. Elections

The National Counterintelligence and Security Center (NCSC) is working closely with the Department of Homeland Security (DHS), the Federal Bureau of Investigation (FBI), the Election Assistance Commission, and other Federal agencies to assess and mitigate foreign governments' actions to interfere in U.S. elections. The Intelligence Community (IC) continuously reviews intelligence to identify foreign threats to the U.S. election infrastructure. The U.S. election infrastructure consists of (a) storage facilities, polling places, voter registration offices, and centralized vote tabulation locations used to support U.S. election processes, as well as (b) information and communications technology, including voter registration databases, voting machines, and other electronic systems used to manage U.S. election processes and display results on behalf of state and local governments. The national-level information needs we cite below are intended to be disseminated to election officials at all levels (state, local, tribal, and territorial) to help them identify, understand, report on and counter any efforts to interfere in U.S. elections. I encourage you to disseminate these information needs to election officials to the widest extent possible to encourage the reporting of suspected or confirmed threats to U.S. electoral infrastructure or election activities.

Foreign governments' efforts to interfere with U.S. elections fall into four distinct categories: (a) cyber operations targeting election infrastructure; (b) cyber operations targeting political organizations, campaigns, and public officials; (c) influence operations to assist or harm political organizations, campaigns, and public officials, or to sway public opinion and sow division; and (d) physical threats to polling places and election offices. Election officials are encouraged to report to DHS and FBI any indicators that foreign actors may be engaged in the following activities prior to, during, and following the day of the election, to include:

SUBJECT: **Election Security Information Needs**: Foreign Threats to U.S. Elections

1. Unauthorized entry or attempts to gain access to long term storage facilities, polling places, and voter centers, including those that may be located on public or private property, used to store election and voting system infrastructure.

2. Incidences of spear-phishing or attempts to hack voter registration systems, to include similar efforts against seemingly unrelated state or local government entities, such as the Department of Motor Vehicles or other agencies or civic organizations responsible for registering voters.

3. Attempts to access, alter, or destroy systems used to qualify candidates; produce and deliver ballots; procure, manage and prepare voting equipment; process requests for absentee ballots; and store and manage election administration process and procedure documentation.

4. Unauthorized access, or attempts to access, IT infrastructure or systems used to manage elections, including systems that count, audit, or display election results on election night and systems used to certify and validate post-election results.

5. Attempts to hack, spear-phish, or compromise personal or professional e-mail accounts and social media accounts of elections officials, staff and volunteers.

6. Hacking attempts or successful hacks into political party headquarters or candidate IT systems.

7. Attempts to access, hack, alter, or disrupt infrastructure to receive and process absentee ballots through tabulation centers, web portals, e-mail, or fax machines; attempts to interfere with votes sent through the U.S. Postal Service.

8. Compromises of any networks and/or systems, including hardware and/or software, by cyber actors to include the tactics, techniques, procedures and impact observed on election-related networks and systems; evidence of interference detected on state networks or systems for cyber security indicators of compromise.

9. Instances of any unexplained disruption at polling stations or training locations for voting officials, including early voting locations, which block or limit voter turnout. Disruptions may include social media posts or robocalls falsely reporting closed or changed polling stations, or physical incidents at polling stations, including distribution of false information.

10. Disinformation efforts to alter or shutdown government web sites to foment social unrest or reduce voter turnout, to include on social media or other electronic means.

11. Unauthorized entry of centralized vote counting/tallying locations or electronic systems or networks used by states and localities to count absentee/military and election day voting ballots.

SUBJECT: **Election Security Information Needs**: Foreign Threats to U.S. Elections

12. Impacts to critical infrastructure that limit access to polling stations such as power, water, internet, telephone (cellular), and transportation (traffic controls) outages.

William R. Evanina

9-5-18
Date

cc: see Distribution List

SUBJECT: **Election Security Information Needs**: Foreign Threats to U.S. Elections

Distribution:

Director of National Intelligence
Under Secretary of Defense for Intelligence
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Deputy Chief of Staff, G2, United States Army
Director of Intelligence, Headquarters, United States Marine Corps
Director of Naval Intelligence, United States Navy
Deputy Chief of Staff for Intelligence, Surveillance and Reconnaissance, United States Air Force
Assistant Commandant for Intelligence and Criminal Investigations, United States Coast Guard

2 October 2018

(U) A Georgia Perspective on Threats to the 2018 U.S. Elections

(U) Prepared by the DHS Office of Intelligence & Analysis (DHS I&A), Field Operations Division, Southeast Region. Coordinated with the DHS I&A Cyber Mission Center.

(U//FOUO) ***DHS I&A assesses that foreign governments may engage in cyber operations targeting the election infrastructure and political organizations in Georgia and engage in influence operations that aim to interfere with the 2018 U.S Elections.*** The motives of these cyber actors and foreign influencers may vary; they may intend to disrupt political processes, sway public opinion, or to support or undermine certain political organizations. In the past month, DHS observed multiple tactics targeting election related infrastructure at the local and state level to include, but not limited to, spearphishing, Cross Site Scripting (XSS), Structured Query Language Injections (SQLI), and attempted Denial of Service (DoS) attacks.[1,2]

(U) DHS I&A is particularly concerned about the potential for the following activities related to the 2018 U.S. election:[1]

- (U) Unauthorized entry to polling places or long-term storage facilities, and voting facilities used to store election and voting system infrastructure.
- (U) Incidents of spearphishing or attempts to hack voter registration systems, such as Department of Motor Vehicles (DMV) or other organizations used to register voters.
- (U) Attempts to access information technology (IT) infrastructure used to manage elections, display results, or for counting or certifying votes.
- (U Hacking or spearphishing attempts against the emails or social media accounts of election officials, staff or volunteers.
- (U) Hacking attempts of political party headquarters or candidate's IT systems or websites.
- (U) Attempts to hack, alter or disrupt infrastructure used to process absentee ballots or attempts to interfere with votes sent through the US Postal Service.
- (U) Compromise of any networks or systems by cyber actors, including tactics, techniques, and procedures, along with the impact observed on election-related systems.
- (U) Any unexplained disruptions at polling places or training locations which block or limit voter turnout. This may include social medial messages or robo-calls falsely reporting changed or closed polling locations, or physical incidents at polling locations, including distribution of false information.
- (U) Disinformation efforts to shut down government websites to foment social unrest or reduce voter turnout.
- (U) Impacts to critical infrastructure that limit access to polling stations, such as power outages, internet, telephone (cellular), and transportation (traffic control) outages.[3]

(U) Election officials are encouraged to report any activity related to the above information needs to the Georgia Secretary of State's Office.

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[1] For additional elections security related resources visit https://www.dhs.gov/publication/election-security-resources

[1] (U//FOUO) DHS; IIR 4 007 0590 18; (U//FOUO) Attempts to Illegally Access Online Voter Registration Database Using Structured Query Language Injections and Cross Site Scripting; Extracted Information is (U//FOUO); Overall document is (U//FOUO).

[2] (U//FOUO) DHS; IIR 4 007 0605 18; (U//FOUO) Spoofing of Senior State Election Official Email Address to Send Spearphishing Email to City Government Official; Extracted Information is (U//FOUO); Overall document is (U//FOUO).

[3] (U) ODNI Director of the National Counterintelligence and Security Center; NSCS-18-502; (U) Election Security Information Needs: Foreign Threats to U.S. Elections; 05 SEP 2018.

UNCLASSIFIED

Office of the Director of National Intelligence

Cyber Threat Intelligence Integration Center

Cyber Threats to Elections

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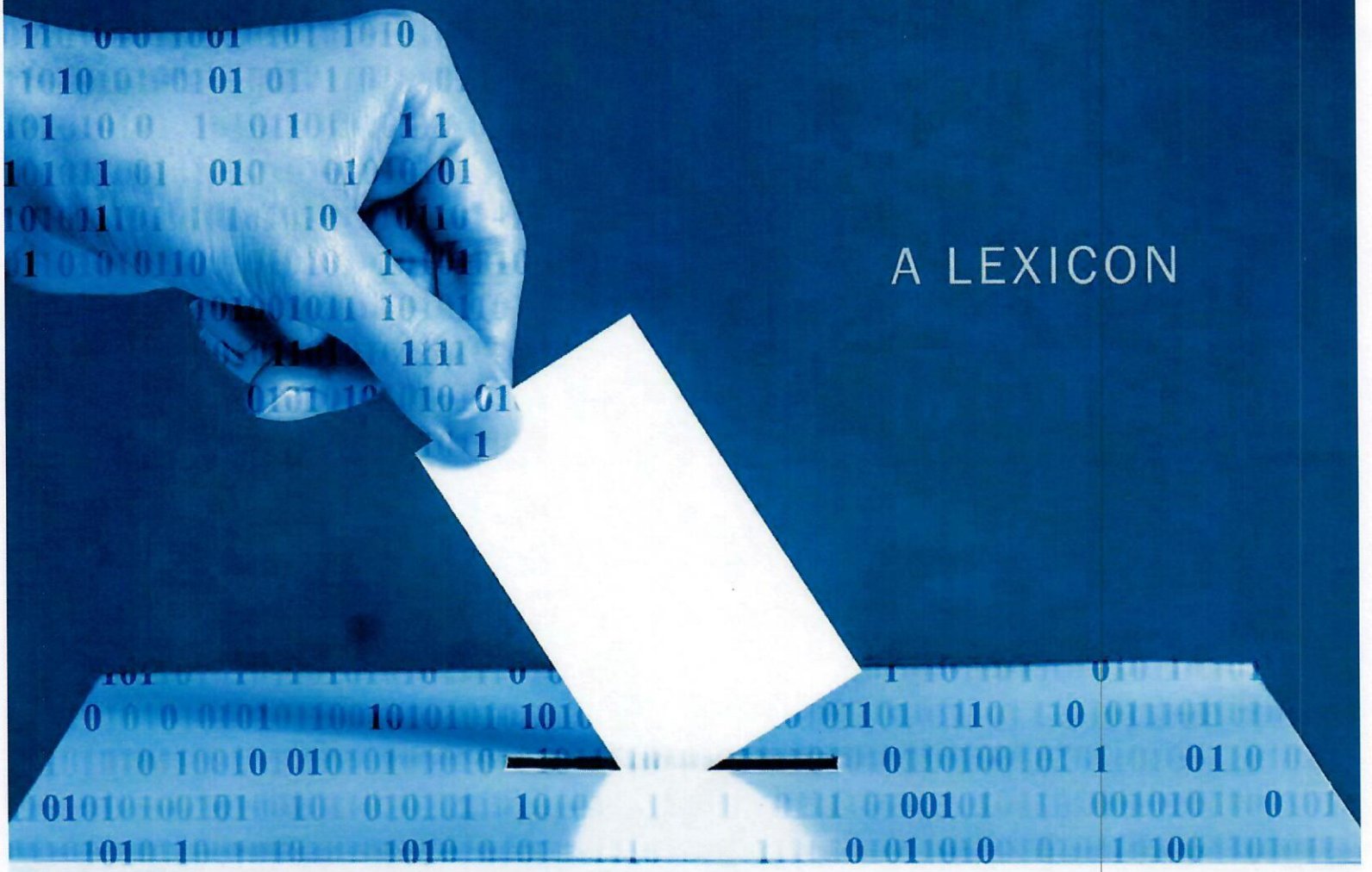

Cyber Threats to Elections

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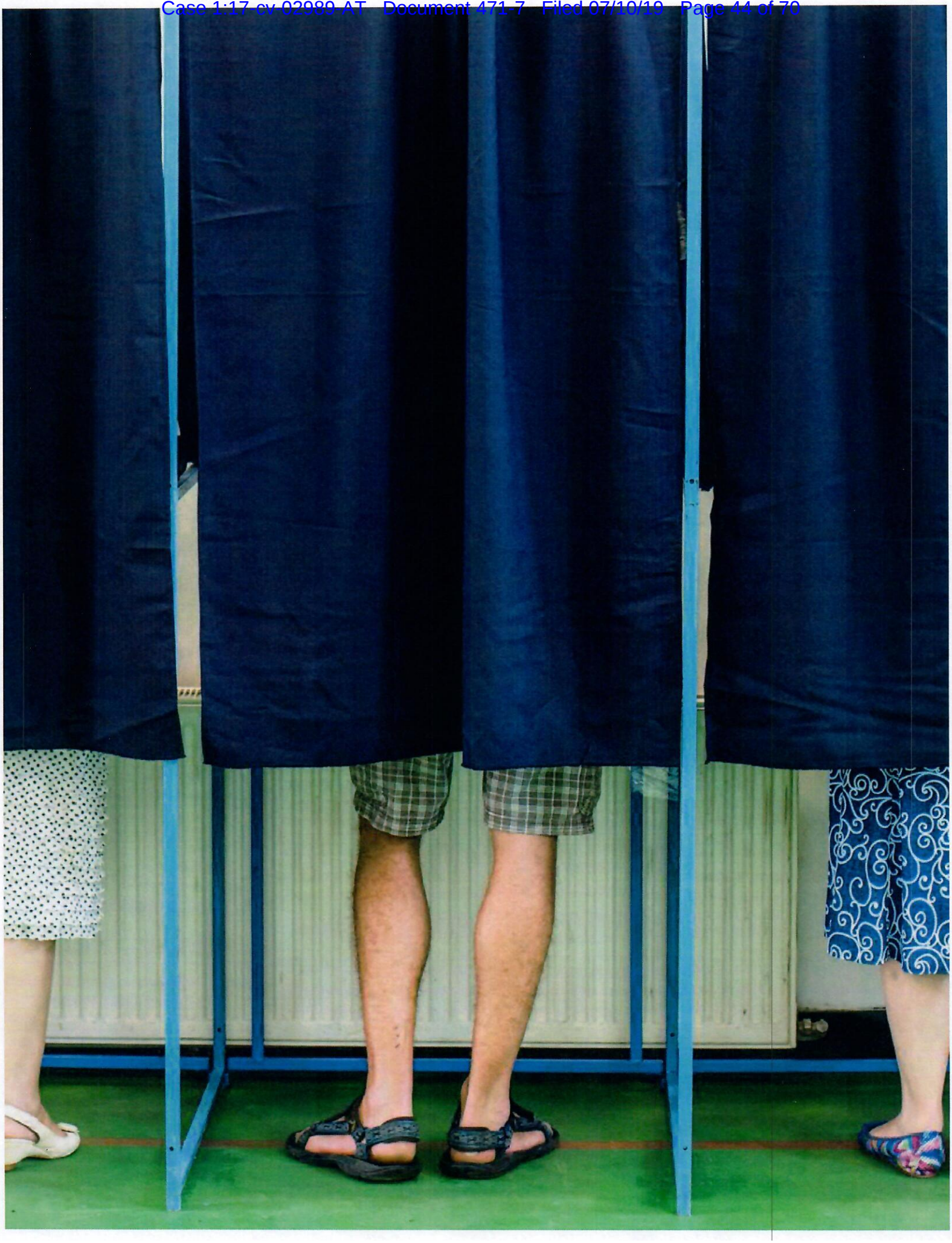
Office of the Director of National Intelligence

Cyber Threat Intelligence Integration Center



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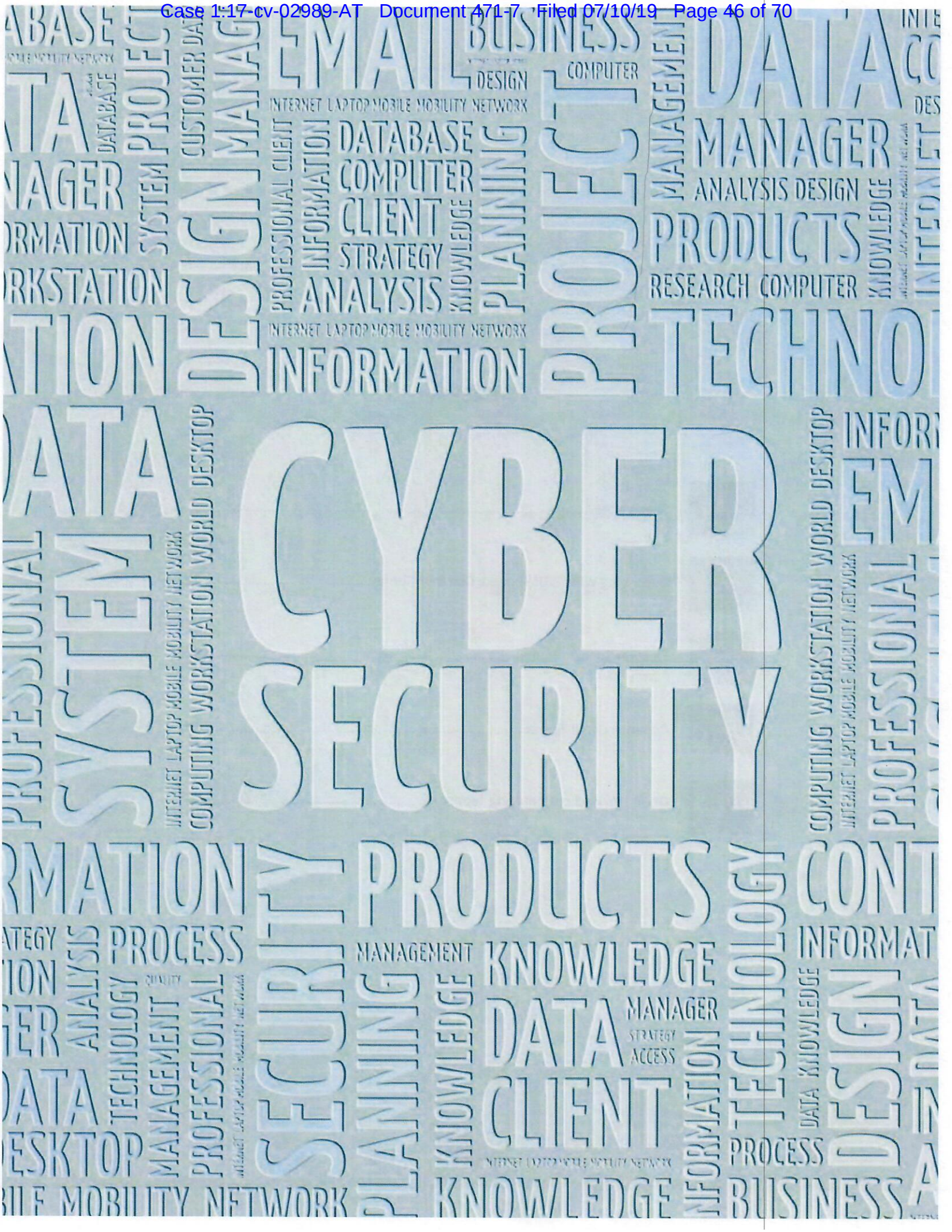
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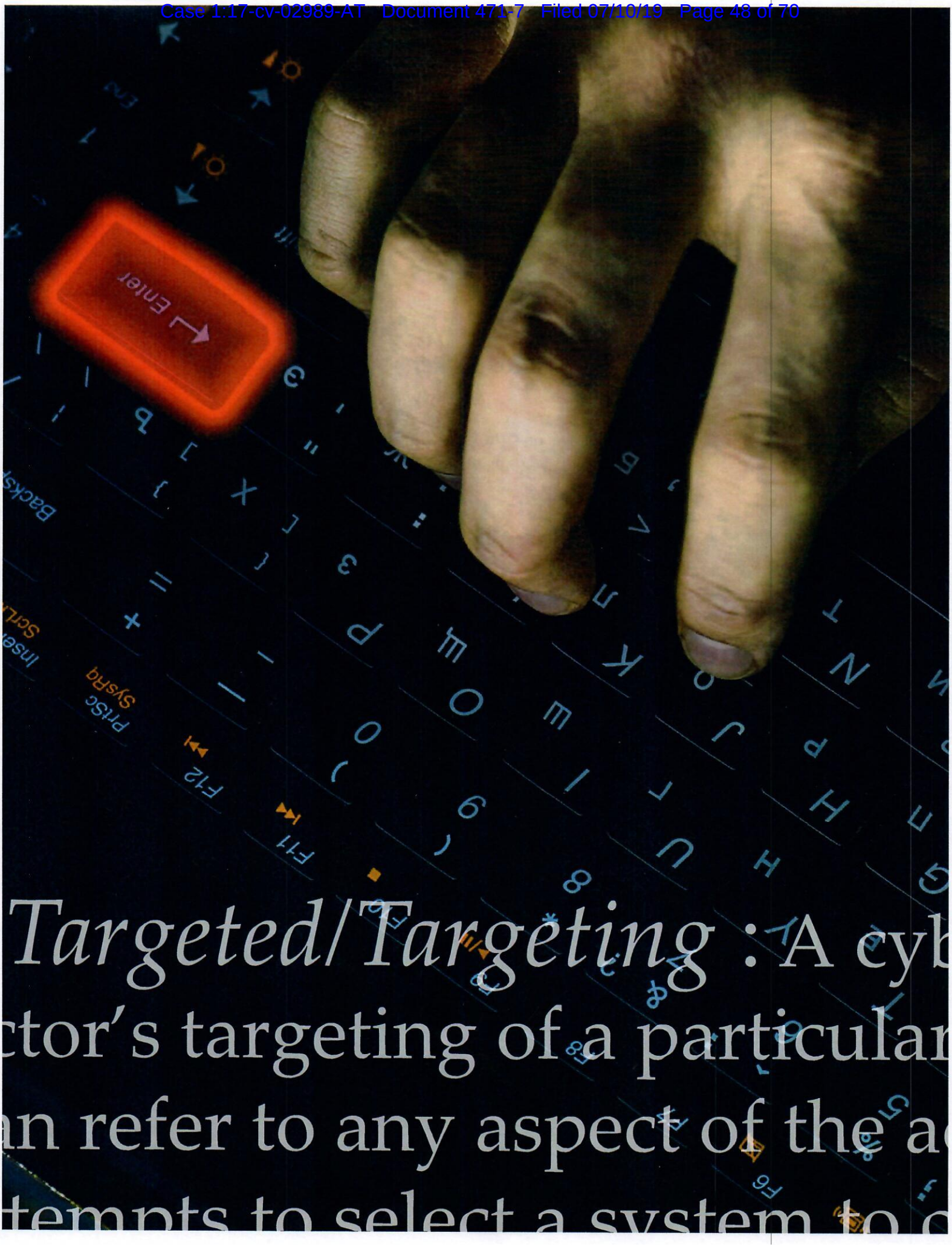
COMPUTER
ANALYSIS
STRATEGY
INTERNET LAPTOP MOBILE MOBILITY NETWORK
COMPUTING WORKSTATION WORLD DESKTOP
ANALYSIS DESIGN
RESEARCH COMPUTER

Scope Note

This reference aid draws on CTIIC's experience promoting interagency situational awareness and information sharing during previous significant cyber events—including cyber threats to elections. It provides a guide to cyber threat terms and related terminology issues likely to arise when describing cyber activity. The document includes a range of cyber-specific terms that may be required to accurately convey intelligence on a cyber threat event and terms that have been established by relevant authorities regarding technical infrastructure for conducting elections.

CTIIC will adhere to this terminology guide in future documents related to cyber threats to US elections and recommends use by others in the interest of consistency and clear communication.

Please note that this reference aid is not intended to address terminology related to political or other noncyber aspects of influence or interference involving elections, nor is it intended to be a comprehensive guide to cyber threat terminology.



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Describing What's Happened: Common Terms

The following terms are central to accurately describing cyber threat activity but are often used differently. CTIIC recommends their use be accompanied by definitions and any necessary context for nontechnical readers.

Attacked

Indicates that a cyber actor has attempted to degrade, destroy, disrupt, manipulate, or otherwise detrimentally affect the operation of a system or network. However, manipulation or deletion of data solely for the purpose of hiding one's tracks is not considered an attack. Some reports use "attack" and "exploit" synonymously, drawing in part on the cryptanalysis sense of "attack"—the use of a technical approach to defeat a security measure. The dual usage can cause confusion, especially for nontechnical readers, if the context does not fully explain the type of malicious cyber activity that occurred.

Compromised

Indicates that a victim system has installed malware, connected to a malicious Internet Protocol address, or provided a cyber actor unauthorized access to collect data or execute commands.

Exploited

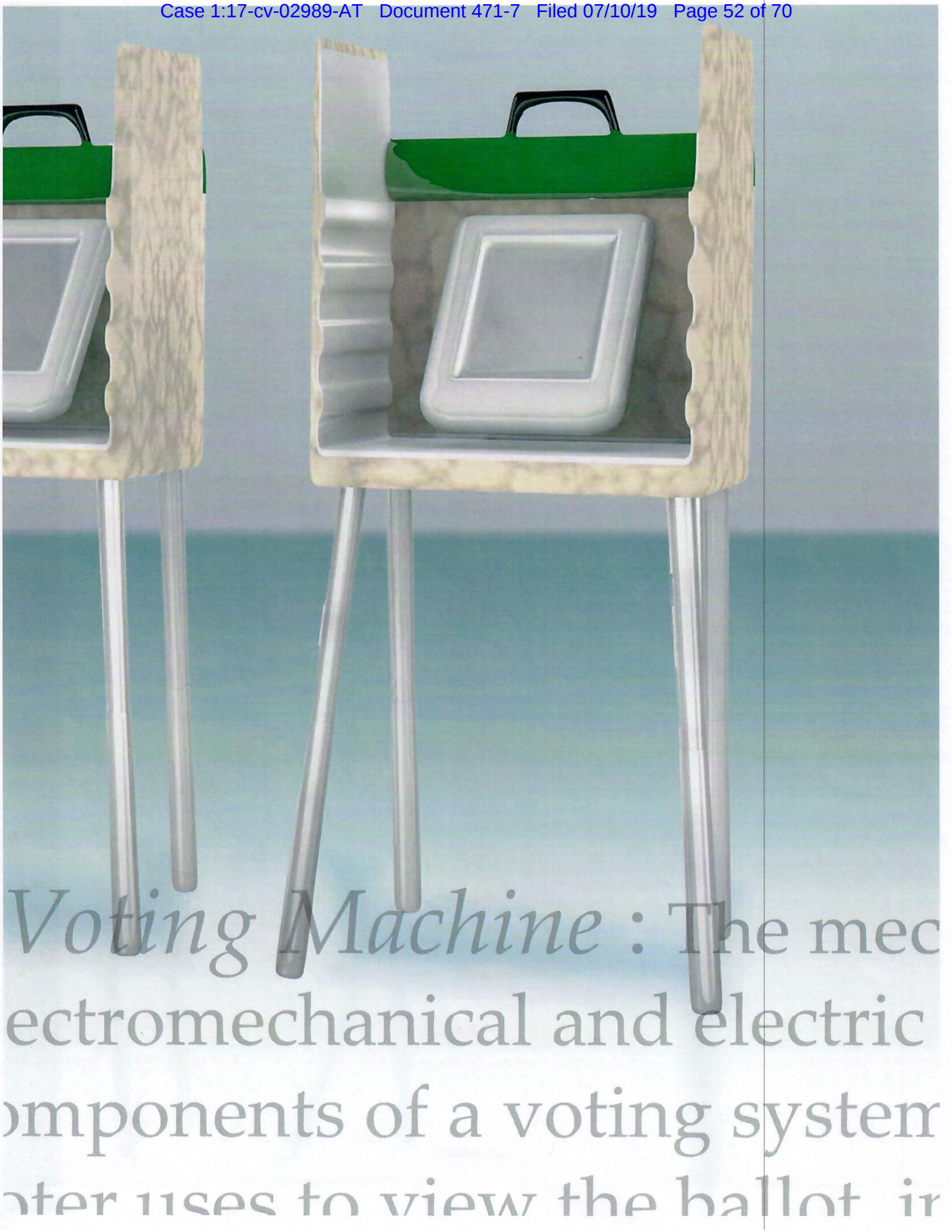
Indicates that a malicious actor has conducted additional activities on a compromised system, such as collecting data, deploying more malware, or establishing persistent access. Some documents—within both the IC and the private sector—use exploited and compromised synonymously. In practice, however, cyber actors may compromise more accounts and systems than they exploit, in part because of the availability of tools to automate the process of compromising vulnerable systems. Distinguishing whether and how an actor has made use of a compromised system—whenever available intelligence allows—aids in understanding the impact and implications of the malicious cyber activity.

Scanned/Scanning

Scanning a system involves attempting to identify the security vulnerabilities the system may have by sending it specific network traffic and observing its responses. The definition is reasonably specific but can cause confusion—and potentially undue alarm—if it is assumed to include follow-on attempts to exploit any vulnerabilities discovered. Scanning is extremely common on the Internet but may have only a modest success rate, and cyber actors therefore scan far more systems than they actually affect.

Targeted/Targeting

A cyber actor's targeting of a particular victim can refer to any aspect of the actor's attempts to select a system to conduct operations against, learn about, find vulnerabilities, gain access, or conduct other malicious activities. The term also connotes an attempt at conducting malicious cyber activity, without indicating the degree of success an actor achieved. We recommend greater specificity and clarification of the specific usage whenever available intelligence allows.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Election-Specific Terms

These terms have been defined by the US Election Assistance Commission (EAC), a bipartisan commission charged with developing voting system guidelines.

Audit

Systematic, independent, documented process for obtaining records, statements of fact, or other relevant information and assessing them objectively to determine the extent to which specified requirements are fulfilled.

Ballot

The official presentation of all of the contests to be decided in a particular election.

Central Count Voting System

A voting system that tabulates ballots from multiple precincts at a central location. Voted ballots are placed into secure storage at the polling place. Stored ballots are transported or transmitted to a central counting place, which produces the vote count report.

Claim of Conformance

Statement by a vendor declaring that a specific product conforms to a particular standard or set of standard profiles; for voting systems, National Association of State Election Directors (NASED) qualification or EAC certification provides independent verification of a claim.

Direct Recording Electronic (DRE) Voting System

System that uses electronic components for the functions of ballot presentation, vote capture, vote recording, and tabulation that are logically and physically integrated into a single unit. A DRE produces a tabulation of the voting data stored in a removable memory component and in printed hardcopy.

Election Databases

Data file or set of files that contain geographic information about political subdivisions and boundaries, all contests and questions to be included in an election, and the candidates for each contest.

Electronic Voting System

One or more integrated devices that use an electronic component for one or more of the following functions: ballot presentation, vote capture, vote recording, and tabulation.

Independent Testing Authority (ITA)

Replaced by "accredited testing laboratories" and "test labs." Previous usage referred to independent testing organizations accredited by NASED to test voting system qualifications.

Internal Audit Log

A human-readable record, residing on the voting machine, used to track all activities of that machine. This log records every activity performed on or by the machine, indicating the event and when it happened.

Precinct Count Voting System

A system that tabulates ballots at the polling place, typically as they are cast, and prints the results after the close of polling. For DREs, and for some paper-based systems, these systems electronically store the vote count and may transmit results to a central location over public telecommunication networks.

Security Analysis

An inquiry into the potential existence of security flaws in a voting system. Includes an analysis of the system's software, firmware, and hardware, as well as the procedures associated with system development, deployment, operation, and management.

Security Controls

Management, operational, and technical controls (i.e., safeguards or countermeasures) prescribed for an information system to protect the confidentiality, integrity, and availability of the system and its information.

Voting System

The total combination of mechanical, electromechanical, or electronic equipment (including the software, firmware, and documentation required to program, control, and support the equipment) that is used to define ballots; to cast and count votes; to report or display election results; and to maintain and produce any audit trail information; and the practices and associated documentation used to identify system components and versions of such components; to test the system during its development and maintenance; to maintain records of system errors and defects; to determine specific system changes to be made to a system after the initial qualification of the system; and to make available any materials to the voter (such as notices, instructions, forms, or paper ballots).

The following terms, which reflect the changing technology used at election polling stations, have been defined by organizations other than the EAC.

Ballot on Demand (BOD)

A dedicated application that prints out a dedicated ballot as each voter checks in. BODs may also be used by polling stations to print additional ballots in emergency situations.

Election Management System

Set of processing functions and databases within a voting system that defines, develops, and maintains election databases; performs election definitions and setup functions; formats ballots; counts votes; consolidates and reports results; and maintains audit trails.

Election Reporting System (ERS)

A web-based election management system that includes the following functionalities: candidate filing and ballot question entry; election night reporting (ENR) of results and statistics; post-election review module for statutorily required manual results review following state general elections; recount module for Federal, state, or county-level recounts; and numerous reports related to above functionalities.

Electronic Pollbook (e-Pollbook)

Hardware, software, or a combination of the two that allows election officials to review and/or maintain voter register information for an election but does not actually count votes. The functions of an e-pollbook often include voter lookup, verification, identification, precinct assignment, ballot assignment, voter history update, name change, address change, and/or the redirection of voters to correct voting location.

E-Voting

The act of casting any ballot in a public election or referendum on an electronic voting machine.

Internet Voting

The act of casting any ballot in a public election or referendum via the Internet.

Operational Environment

All software, hardware (including facilities, furnishings, and fixtures), materials, documentation, and the interface required for voting equipment operations used by the election personnel, maintenance operators, poll worker, and voters.

Remote Accessible Vote by Mail System

A mechanical, electromechanical, or electronic system and its software that is used for the sole purpose of marking an electronic vote by mail ballot remotely, outside a polling location, for a voter with disabilities or a military or overseas voter who would then be required to print the paper-cast vote record to be submitted to the elections official.

Voting Machine

The mechanical, electromechanical, and electric components of a voting system that voters use to view the ballot, indicate their selections, and verify those selections. In some instances, the voting machine also casts and tabulates the votes.


Cyberspace : A global doma
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Common Cyber Terms

The terms in this section are commonly used in cyber intelligence, investigations, operations, security, and general technology discussions. These terms will probably be encountered in finished intelligence and reporting on election issues.

Attribution

A determination of the perpetrators and/or sponsors of a cyber operation.

Availability

A guarantee of reliable access to the information by authorized people.

Beaconing

A process through which a system or program sends a message announcing its presence online. This term is typically used in a cyber threat context to indicate a compromised system communicating with an actor's command-and-control infrastructure to indicate its availability.

Confidentiality

A set of rules that limits access to information.

Cyber Deterrence

The prevention of cyber action by credibly demonstrating the ability and willingness to deny benefits or impose costs to convince the adversary that restraint will result in better outcomes than will confrontation.

Cyber Defense

A set of processes and measures to detect, monitor, protect, analyze, and defend against network infiltrations. *See Cyber Security.*

Cyber Disruption

Activities initiated by the threat actor that temporarily negatively alter or prevent the operation of the victim's network.

Cyber Effect

The manipulation, disruption, denial, degradation, or destruction of computers, information or communications systems, networks, physical or virtual infrastructure controlled by computers or information systems, or information resident thereon.

Cyber Espionage

The intentional clandestine acquisition of information from targeted networks without altering the information or affecting users' access.

Cyber Influence

The use of cyber operations to shape the perceptions or behavior of targeted audiences while maintaining plausible deniability.

Cyber Operation

An umbrella term to describe cyber attack, cyber espionage, cyber influence, or cyber defense, and intrusions or activities with unknown intent.

Cyberspace

A global domain within the information environment consisting of the interdependent networks of information technology infrastructures and resident data, including the Internet, telecommunications networks, computer systems, and embedded processors and controllers.

Cyber Security

The protection of information systems against unauthorized access to or modification of information contained therein, and against the denial of service to authorized users, including those measures necessary to detect, document, and counter such threats. Also known as network security. *See Cyber Defense.*

Cyber Threat

Cyber operations or noncyber actions (intentional or accidental) that compromise the confidentiality, integrity, reliability, or availability of digital devices, systems, networks, or data.

Cyber Threat Intelligence

The collection, processing, analysis, and dissemination of information from all sources of intelligence on foreign actors' cyber programs, intentions, capabilities, research and development, tactics, operational activities and indicators, and their impact or potential effects on US national security interests. Cyber threat intelligence also includes information on cyber threat actor information systems, infrastructure, and data; and network characterization or insight into the components, structures, use, and vulnerabilities of foreign cyber program information systems.

Data Integrity

A performance measure or service that ensures data has not been accidentally or maliciously modified, altered, or destroyed.

Database

A structured collection of data that is organized to provide efficient retrieval.

Destroy (Hardware/Software/Data)

Permanently, completely, and irreparably damage a victim's physical or virtual computer or information system(s), network(s), and/or data stores; for example, system administrators discover permanent unexplained damage to portions of the information system, or system users discover that data or files have been inappropriately corrupted or deleted.

Digital/Electronic Signature

Any mark in electronic form associated with an electronic document, applied with the intent to digitally sign the document.

Distributed Denial-of-Service (DDoS) Attack

A type of cyber attack designed to prevent users from accessing a network-connected service by sending simultaneous illegitimate requests from numerous sources. Data is sent to overload a network's resources.

Encoding

The process of translating binary characters into representing characters (e.g., letters and numbers).

Encryption

The conversion of plaintext, by means of a defined system (e.g., a "cipher"), so that it is unintelligible to an unauthorized recipient.

Exfiltration

The transfer, either electronically or physically, of information from a victim system by a threat actor without the data owner's permission.

Exploitation

The act of extracting and gathering intelligence data, often from a cyber attack or cyber espionage.

Hop Point

A compromised or commercially purchased intermediary system that is used as a proxy to disguise the attacker's true point of origin.

Information Security

Protecting information and information systems from unauthorized access, use, disclosure, disruption, modification, or destruction in order to provide integrity, confidentiality, and availability.

Insider Threat

The risk that one or more individuals with the access to and/or internal knowledge of a company, organization, or enterprise would exploit the vulnerabilities of that entity's security, systems, services, products, or facilities with the intent to cause harm.

Intrusion Set

A group of cyber security incidents that share similar cyber actors, methods, or signatures.

Intrusion

A computer system or network compromise; may describe a broad range of activities used to support cyber attacks, cyber influence, or cyber espionage. *See also: Compromise, Penetration.*

Malicious Cyber Activity

Activities, other than those authorized by or in accordance with US law, that seek to compromise or impair the confidentiality, integrity, or availability of computers, information or communications systems, networks, physical or virtual infrastructure controlled by computers or information systems, or information resident thereon.

Network

An information system comprising a collection of interconnected computers or devices.

Penetration

The unauthorized access or compromise of an electronic system, computer, or network by a cyber actor. *See also: Compromise, Intrusion.*

Persistence

The ability of malware (malicious software) to maintain access to a compromised system even after mitigation steps have been taken. Achieving some degree of persistence eliminates the need to reinfect a machine.

Personally Identifiable Information (PII)

Any representation of information that permits the identity of an individual to whom the information applies to be reasonably inferred by either direct or indirect means.

Reconnaissance

The act of determining vulnerabilities in a targeted system or network. (Common examples include port scanning and open network traffic analysis.)

Remote Access (noun) or Remote-Access (modifier)

The ability to gain access to targeted systems or networks from a distance, such as over the Internet.

Router Operation

A method for compromising midpoint network infrastructure—such as routers—rather than specific computers or networks, to illicitly observe, redirect, tamper with, impede, or in some other way adversely affect network communications.

Server

A machine that provides services (for instance a web server, e-mail server, proxy server, file server, or print server) to other machines. In general, all machines on the Internet fall into two categories: clients and servers. Where the available intelligence permits, specify the type of server involved (e.g., an e-mail server).

Vulnerability

An exploitable flaw that can undermine a system's security. (This term is often used to describe the overall strategic perception of susceptibility to a given threat actor. It should only be used to describe a cyber-system issue.)

Zero Day (noun) or Zero-Day (modifier)

A cyber capability that relies on a vulnerability in the design or implementation of a system and can be used to violate its security. Neither the system designers, cyber security community, or general public are aware of the vulnerability.


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Spoofing : Using a counterfe
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Often Misused or Confusing Terms

The terms in this category are commonly used in several contexts, including cyber security, intelligence, and election vernacular. We recommend against their use in finished analytic production because the terms lack necessary specificity or because they have been replaced with other terms in the common lexicon of the cyber community.

Advanced Persistent Threat (APT)

An industry term used to describe suspected offensive cyber activity in which the cyber actor occupies the network for an extended period while continuously penetrating systems and avoiding detection. *See Intrusion Set.*

Operational Relay Box (ORB) *See Hop Point.*

Proxy

A service that relays users' Internet traffic while hiding the link between users and their activity.

Spoofing

The use of a counterfeit domain, Internet Protocol (IP) address, or e-mail in an attempt to mislead the recipient as to the origin of the original communication or as a means of malicious redirection.